- V.—Field-notes on the Birds of Efulen in the West-African Colony of Kamerun. By George L. Bates *.
 - 1. Agapornis pullaria 2. Agapornis zenkeri } (Ibis, 1904, p. 605).

As I have not distinguished these two species from one another, they must be spoken of together. They resemble minature Parrots in their tones and actions as well as in their appearance. They go about in small flocks, making little metallic squeaky cries, which yet have something in them recalling the screams of Parrots. They like open country, and especially the tall grass called "nkaé," from which they get their Bulu name of "Kôs-nkaé" ("kôs" meaning Parrot); hence they are more common inland, for grass is scarce within a hundred miles of the coast.

At the back of my house at Efulen was a sort of wild figtree, and when its fruit was ripe a flock of these little birds often visited it. Among them were apparently young birds, which would sit on a limb making a great racket and fluttering their wings till the others brought them food.

3. Ortholophus albocristatus (t. c. p. 609).

This is strictly a forest-bird. It makes a practice of flying near the ground under the trees where a company of monkeys is feeding, and picks up the fruit that they drop. I have seen an individual joining with smaller birds in pecking at a swarm of "driver" ants on the ground. It has a most disagreeable cry, resembling the squawking of a hen when caught. Usually I have observed it solitary, but one day,

* [These notes were prepared to accompany Dr. Bowdler Sharpe's paper on the birds of Efuleu, which appeared in the last number of 'The Ibis' (1904, p. 591). Unfortunately they arrived too late for insertion, but are of so much interest that they deserve publication. Mr. Bates has now gone on a six months' holiday to Illinois, U.S.A., after which he proposes to return to West Africa and resume his work. A map of the northern part of the Balu district of Kamerun, in which Efulen is marked, will be found in the 'Mittheilungen von Forschungsreisenden und Gelehrten aus den Deutschen Schutzgebieten,' vol. xii. p. 38 (1899).—Edd.]

when I was going along a forest-path, I heard a variety of strange noises in the tree-tops, and soon discovered a party of half a dozen "Bōbone" (as the natives call them) ehasing each other, apparently in play.

4. Bycanistes albotibialis Cab. et Reich. (Grant, Cat. B. xxii. p. 420).

This bird (the "Miam") is the most common of the larger Hornbills. Two or more are generally found together, in the tops of the tall forest-trees which bear the fruits that they eat. As the foliage generally hides them from view, they are less often seen than heard. They have a loud clamorous call, and besides make querulous eries while they feed; whenever they take flight the rushing sound of their wings is quite startling.

I have watched Hornbills feeding and pulling from the trees fruits that cling tightly. They seemed to turn the head in such a manner as to bring their great casque against the twig and get a purchase, and so to wreuch the fruit off, as a man does in the ease of an apple that sticks fast by turning his hand and bringing the knuckles against the twig.

5. Bycanistes sharpii (Ibis, 1904, p. 609).

The "Zanga-miam," as this species is called, is very like the larger "Miam" in habits, and often goes in company with it. It is less noisy and has a different manner of flight; for while the "Miam" flies steadily and heavily, the "Zanga" progresses in long undulations and is quite light and graceful for a Hornbill.

6. Scoptelus brunneiceps (t. c. p. 610).

The three specimens of this species obtained were shot on two occasions. At both times the birds were seen in small flocks of from three or four to half a dozen. They were silently hunting for insects among the trees of old eleared land, flitting from bough to bough and sometimes clinging head downwards like a Sun-bird. The stomachs of my specimens contained insects of various kinds and a spider, while one had also some seeds in it. After killing the last example I saw one of these birds sitting alone and uttering a call, consisting of a clear loud note repeated six or eight times or more, when a pause ensued. Sometimes there was a quaver or "cracked" tone in its voice. It kept this up till some little birds of another kind came to annoy it, when, after a few sallies at them, it flew away. When I had learned this bird's call I found that it was not rare, for I heard it again several times in different places.

7. Merops albicollis (Ibis, 1904, p. 611). "Nso'oloñ." Though I have sometimes seen one or two of these birds together, perched conspicuously on a bare twig, yet I have more often noticed them in small flocks. Sometimes a party comes and occupies the topmost branches of a large tree, with much twittering. Sometimes they eircle or skim high in the air like slow-moving Swifts. I have more than once seen flocks circling over the waters of a good-sized stream, into which they took occasional plunges and out of which they emerged quickly, shaking their feathers. There is an air of distinguished grace about this bird, not only in the fine curves of its body, but in all its movements. It is not so much beautiful as elegant.

8. Cypselus batesi (t. c. p. 612).

The unique specimen was caught alive by a boy in a large mud-nest plastered on the underside of an overhanging rock, in a small bit of forest near a stream between two plantations. The nest was evidently an abandoned Swallow's nest; there were remains of others beneath the same rock. But the Swift must have been sitting on its own eggs. There were two white eggs in the nest almost hatched.

9. Corythæola cristata (Shelley, Cat. B. xix. p. 449).

Though the "Kunduk" was not included in Dr. Sharpe's list, I venture to put it in here as a companion to the next, the "Mba."

This species roams about in small parties among the high trees of the forest, flying over the tops or running along the branches. When one is winged it will run along the ground like a Turkey, and often escapes through the underbrush. The flight is easy and graceful and the birds sail far without flapping. The call is a loud and rapidly repeated note, which may be heard far through the forest. Another peculiar call, consisting of a loud clucking note repeated more slowly, is heard from a solitary bird, perhaps a sitting female when off the nest.

The "Kunduk" has a proud and graceful carriage, as it arches its long neck while cautiously peering amongst the leaves at the hunter. When not old and tough it is good eating.

10. Turacus meriani (Ibis, 1904, p. 613).

The "Mba" is one of our commonest birds. It makes a loud and harsh croaking call. It is found both in the forest and in the clearings, and especially frequents the aseñ trees of old gardens to eat their fruit, driving away the little birds and the Green Pigeons that always occur where ripe aseñ fruit is to be found. I have never seen the Mba fly far. It runs along the branches like a squirrel or a monkey, hopping from one to another, and only using its wings where the trees or branches are far apart. Then it flies with an easy gliding motion, as if the force to carry it forward came from the spring with which it left the branch, and not from its wings. The flesh of the Mba is good eating.

11. HELIOBUCCO BONAPARTII (t. c. p. 617).

This bird, the smallest of the "Ôvôls," is very frequently seen. I have found several of its colonies in holes in dead trees near villages. They bore from a dozen to fifty holes in the trunk of a dead tree that is beginning to decay, and seem to reside there permanently. Near the village on the Ja River which I visited, stood the dead and half-rotten trunk of an immense cotton-tree. It was perforated for most of its length by the holes of these birds. When the base of the tree was struck with a stick a crowd of them flew out. Then when the trunk was hit harder, little bats (a species of Nyctinomus) flew out of the same holes. That the natives often find these bats and birds living together in the same holes is shewn by a curious notion which they

have. When a boy brought me two white eggs taken from an Ovôl's hole, he said that the little bats of the kind mentioned were hatched from the eggs laid by the Ovôl.

These birds are often seen feeding on the small trees on old cleared land. They eat insects to some extent, but berries and fruits form their principal food. An "aseñ"-tree with ripe fruit is a constant resort, and they will chase away other birds from the spot where they wish to feed, even the Green Pigeons.

The Ôvôl is the most quarrelsome of birds. The principal use it finds for its voice is to express anger. More than once individuals have been picked up by boys from the ground, alive but exhausted by fighting. Once two were so brought to me, still holding each other by the claws and uttering loud angry cries. They were females.

12. Trachylæmus purpuratus (Ibis, 1904, p. 618).

The "Ékuku," which is the largest of the Barbets, has habits very like the others. Its favourite haunt is the tangled growth of old cleared land, where it searches for the fruits on which it feeds. Being secretive it is seldom seen, but it is continually heard. Its usual call is a monotonous note repeated slowly, about half a dozen times, in a soft far-away tone. This is usually answered by the same call from another bird (its mate?) a little way off, and the second often begins before the first has finished, so that the two are heard at once. While making this call the bird bends its head forward at each note (though an observer seldom sees that, as the bird is usually hidden). It also sometimes makes a rough guttural croaking noise, or an alarm-note, imitated by the Bulu name "Ékuku."

13. Verreauxia africana (t. c. p. 620).

All of my specimens of this bird had in their stomachs small white grubs, such as bore in the stems of plants or under bark. Once I saw a little fellow of this species, not many yards away, pecking at a small green endogenous stem no larger than a pencil. After it flew away I went to look, and found a fresh hole pierced to the worm-eaten heart of the stem, but no worm.

14. Muscicapa lugens (Ibis, 1904, p. 623).

The habits of this bird, which is called "Kula" or "Ôkulebe," are exactly like those of the little Alseonax epulata with the same native name, except that its look-out station is always some projecting snag or log over a stream, while that of Alseonax is some bare twig in a glade in the depths of the forest. Both birds seem to avoid thick foliage, requiring a small open space for their fly-catching evolutions; but while the little Alseonax finds open spaces in the forest, the larger Muscicapa keeps to the more spacious and better-lighted openings over water.

15. Dіарногорнуї сазтапел (t. с. р. 625).

These fluffy little birds belong to the dark forest, though they come also into the thickest part of the growth around the villages. Sometimes they make a great noise with their wings as they flit from branch to branch among the trees, and sometimes they make a sharp snapping noise like the cracking of a whip. I ascertained at last that the latter noise was made with the bill and not with the wings, as I saw a bird making it while sitting still on a twig. Occasionally, when near enough, I could hear a vocal sound accompanying the snap. The snapping sound is perhaps made by the male alone, as it is only the black-and-white bird that I have observed producing it.

16. Bias musicus (t. c. p. 626).

While it is true that the name of "musicus" does more than justice to this little fellow's vocal efforts, the "Kulityañ" appears to try to deserve the name, for he is continually uttering his "kuli-tyañ! tyañ!"; he begins slowly, then repeats the notes faster and faster till they become jumbled together. His brown mate, at least, regards it as a first-rate performance, for she may always be heard answering with her little harsh "churr!"

Both male and female have a peculiar way of flying, with much fluttering of wings and little progress—a sort of mineing flight. The male is especially fond of doing this, making the white on his wings flash or twinkle in the sunshine.

This bird lives around village clearings, not venturing into the dark forest.

17. SMITHORNIS ZENKERI (Ibis, 1904, p. 627).

The female specimen of this bird was caught in its nest at night in the forest, near the spot where I was camping at the time. The nest was a hanging pocket-shaped mass of moss, on a bush five feet from the ground. It contained one white egg—size 16×23 mm. The date was January 2nd.

The males of both species of *Smithornis* make short circuitflights about the small openings of the undergrowth in the forest, uttering meanwhile a rattling noise, which may be best imitated by blowing between the protruded lips and making them vibrate, and at the same time using the voice.

18. Artomyias fuliginosa (t. c. p. 628).

The "Mula" (dark) is often seen sitting motionless on a dead twig or on the loop of a vine, where its watch for insects is not obstructed by foliage; thence it makes its sallies and returns to the same spot. In the stomachs of the examples that I have skinned were often found small, brightly-coloured beetles almost whole: two small metallic Buprestidæ so obtained were good enough for specimens.

The young bird (No. 402) was found on the ground under a tall tree after a storm. No. 365 met its death by becoming entangled in the strong web of a large yellow-andblack spider, where my boys, seeing it struggling, went and caught it.

19. TCHITREA VIRIDIS (t. c. p. 630).

This species of *Tchitrea*, called "Abelebe," is fond of the neighbourhood of villages, where the male may often be seen whisking his white tail-plumes in and out among the bushes. *T. tricolor* keeps more to the forest. I have seen several of the tiny cup-shaped nests of *T. viridis*, placed in the forks of bushes and small trees in the open ground about villages. Though I have not myself seen the male on the nest, the

natives have told me (and I do not doubt their correctness) that he shares incubation with his mate.

I once saw a female busily bringing insects to a great complaining young Golden Cuekoo (probably *Chrysococcyx cupreus*).

The cry of the "Abelebe" is a low buzzing chirrup—so slight a sound as to be hardly noticeable, but so peculiar that when learned it eannot again be mistaken. The forest species has the same cry.

20. Elminia Longicauda (Ibis, 1904, p. 631).

This pretty little Flycatcher, known as the "Oseminjombôk," is very common in old-clearing growth on the Ja, but less so about Efulen. It is most often seen in the evening, hopping about on bare twigs and continually spreading its fine tail, while always in motion. Even when singing it continually turns its body and spreads its tail. Its notes are very pleasing, as fine and sweet as those of a Sun-bird, but more varied and rich.

21. Criniger calurus (t. e. p. 632).

This species is seen in nearly every *éjak*, or company of little birds feeding together in the forest, and is rarely seen except with an *éjak*. Its white throat is very conspicuous, and it has a way of spreading the long white feathers of that part when excited, as some other birds have of raising their crests; so that it may almost be said to have a crest beneath instead of on the top of the head. It is an insect-eater.

22. Bleda simplex (t, c. p. 632).

The "Nkes's" notes have something of the peculiar quality of those of the "Ngomejal," but they are fewer and not so loud. It is a bird of the old cleared land about villages, and is found wherever the "Nkwe'ele" (Pyenonotus yabonensis) is to be seen, and is almost as abundant. But while the Nkwe'ele is bold, the Nkes is particularly shy, and, though heard continually and often seen for a moment, is hard to approach. It goes alone or in pairs, never in parties. Its principal food consists of insects.

23. Bleda Leucopleura (Ibis, 1904, p. 635).

The "Ngomejal" goes in parties of from two or three to half a dozen, and keeps to the swampy places in the forest, probably because some favourite fruit is found on the trees or vines of the swamp; for, like the "Ntyetyal" and "Ôtok," it is a fruit-eater. The Ngomejal is noisy, uttering notes of a peculiar ringing and at the same time guttural tone, and running them rapidly together, so that they sound like excited talking. It is a restless bird, always on the move.

24. В е в хотата. " Ôlo-éjak" (ор. cit. р. 635).

Both this bird and the "Nti-éjak" (Bleda syndactyla) are also called "Ntyoñ" and are very similar in their habits. The word "éjak" means a company of little birds of different kinds feeding together in the forest, and "ôlo-éjak" means "slave of the company," while "nti-éjak" means "freeman of the company," Though often seen in an éjak, they are frequently met with by themselves. They keep near the ground in the thickest of the undergrowth. Their food consists entirely of insects. They are always among the first birds caught in snares set on the ground and baited with white ants. They are strictly forest-dwellers.

25. Eurillas efulenensis (op. cit. p. 636).

The "Otok" is one of the commonest birds, both in the bush-growth of cleared land and in the forest. Its small size and dull plumage and its skill in hiding itself cause it to be seldom seen unless it be watched for, but it is noisy and may be heard continually. Some of its many notes have a clear ringing tone that is pleasing, but they soon become monotonous. It feeds mainly on small fruits.

I have not generally been able to distinguish between the different species of *Eurillas* when seen wild. While I am sure that the remarks given above apply to the species named, they probably apply to *E. camerunensis* and *E. virens* as well.

26. Ixonotus guttatus (op. eit. p. 638).

Birds of this species, which is called "Ntyetyal," feed on small fruits in the tops of tall trees in flocks of a dozen or SER. VIII.—VOL. V.

so. They arrive together, spend a few moments or, if they find fruit, a longer time in one place, and then are off to another, flying in a body with a cheerful twittering noise. Once I saw a small flock feeding and resting in a low tree, where they could be observed at close quarters. While watching me they went through some antics that seemed comical and almost impudent, extending one wing and keeping the other closed, so that I could not help thinking of a boy standing on one leg and extending the other.

27. Pycnonotus gabonensis (Ibis, 1904, p. 638).

The "Nkwe'ele" is the commonest bird of the cleared land, or, at any rate, that most frequently seen and heard, for it is bold and continually utters its cheerful little call or song. It sings most heartily in rainy weather. It is a versatile bird, being able to circle round and snap up insects on the wing like a Flycatcher, as well as to cling by its claws to the bark of a perpendicular tree-trunk like a Woodpeeker.

Nests of the Nkwe'ele are often found placed on plantains, bushes, or small trees. The fabric is shallow and cup-shaped, made of dry leaves as a base, with fine root-fibres or grass-stems for the interior, and is not lined.

VI.—Remarks on Motacilla subpersonata Meade-Waldo. By Ernst Hartert, Ph.D.

NEARLY everywhere in the Palæaretic Region a form of black-and-white Wagtail is met with. It is therefore not very strange that one should be found breeding in Northern Africa. Until recently this had not been ascertained to be the case, as we only knew of Motacilla alba alba and Motacilla alba lugubris being winter-visitants there. But recently Mr. Meade-Waldo has discovered a very interesting and peculiar race of this group breeding in Western Moroeco, on the Oum Rbiah or Waad Moorbey. It is true that years ago Dr. Sharpe bought from Mr. Boueard a specimen of a Wagtail said to have been received from Moroeco, which is now in the British Museum. This example must, however,